



PVI (Photovoltaics International)
171 Commercial St.
Sunnyvale, CA 94086

Main Phone: 408-746-3062
Fax: 408-746-3890
Email: watts@pvintl.com
Web: <http://www.pvintl.com/>

For Immediate Release

If you don't concentrate, you're not thinking...

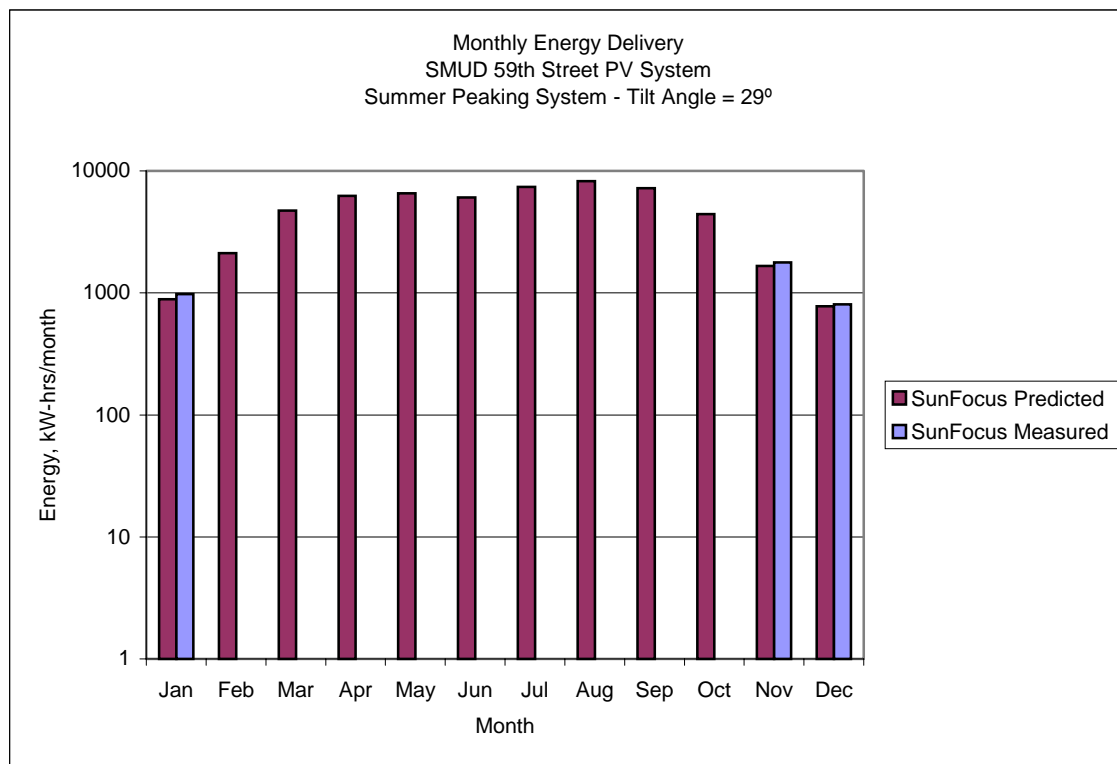
Initial monitoring results from SMUD's first linear solar concentrator project confirm major advantage for the technology

Sacramento, CA, March 3, 2000: Today PVI and the Sacramento Municipal Utility District (SMUD) reported first quarter monitoring results for the linear solar concentrator system located at SMUD's 59th Street Warehouse. The results confirm predictions by computer models that PVI's concentrator project, using its "SunFocus™" technology, will provide about 20% more energy than conventional solar panels.

In October 1999 PVI completed a 30+ kilowatt project to provide power to the Sacramento Municipal Utility District (SMUD). The project is the first installation using PVI's 3rd generation linear concentrator, dubbed the "SunFocus™". Over the past few years, solar technology leaders at SMUD and the National Renewable Energy Laboratory (NREL) have predicted that linear concentrators could be designed to yield significantly more annual energy than conventional flat plate photovoltaic systems of comparable rating and cost. The first quarter monitoring results for PVI's system bear out these predictions.

In the process of developing its latest generation of concentrator, PVI developed a computer model to predict performance. Although the model predicted up to 20% more energy per year for fixed-tilt systems, and up to 50% more energy for its variable tilt panel, these predictions had not been proven in a commercial project until now. The graph below demonstrates that the model accurately predicts system output. “This means that linear concentrators could quickly become a major solar technology,” predicted

SMUD's Dave Collier, project manager for its solar installations. "The first three months of monitored performance show excellent correlation with predicted performance," he added.



Historically, solar technology has been polarized between small, modular flat plate panels producing tens of watts, and very large high-concentration systems producing tens or hundreds of *kilowatts*. Linear concentrators provide a “middle ground”, with PVI’s system designed in 2-kilowatt panels. This makes the efficiencies inherent in concentrators available to relatively small energy users like hotels, residences and village power systems. “Our approach has been to use a fairly low-concentration design that allows us to employ inexpensive solar cells, while still getting the efficiency benefits of a tracking, concentrating system,” said Neil Kaminar, a founder of PVI.